



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,468	08/26/2003	Osamu Abe	2002-249352US	2305
21254	7590	01/11/2006	EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			ENGLUND, TERRY LEE	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

52

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/647,468	ABE, OSAMU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Terry L. Englund	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5,6,8-10,12-14,16,17,19,20,22-24,26,27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8-10,12-14,16,17,19,20,22-24,26,27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment submitted on Oct 28, 2005 has been reviewed and considered with the following results:

The objection to the disclosure, as cited on page 3 of the previous Office Action, has not been addressed. Therefore, that objection has been maintained, and is repeated later under the appropriate section with a slight modification to more clearly describe a connection related problem with one transistor.

The amended claims overcame all but one of the specific objections to claims 1, 3, 5-6, 8-10, 12-17, and 19-29 described in the previous Office Action. Therefore, with the exception of claim 5 and its “the potential” objection, all the other objections have now been withdrawn. The claim 5 objection is described later under the appropriate section, wherein claims 6 and 9 are also objected to since they carry over the objection from claim 5.

Although the amended claims addressed, or at least attempted to address, the various rejections of claims 1, 3, 5-6, 8-9, 13-15, 17, and 19-29 under 35 U.S.C. 112 as described in the previous Office Action, the amended claims either did not satisfactorily address the problems, and/or created new rejections. However, the amended claims did directly overcome the “further comprising” rejections of claims 13 and 23 under 35 U.S.C. 112, which have now been withdrawn. To minimize possible confusion between the 35 U.S.C. 112 related rejections of the previous Office Action and the present Office Action’s rejections, all of the previous Office Action’s rejections under 35 U.S.C. 112 have been withdrawn. The rejections described later in this Office Action cover the known rejections within the present claims.

All the prior art rejections described in the previous Office Action have now been withdrawn. These rejections include: 1) claims 10 and 16 under 35 U.S.C. 102(b) with respect to Kraus et al.; 2) claims 13-14 under 35 U.S.C. 103(a) with respect to Kraus/Oda; 3) claims 13-14, 16-17, 20, and 22 under 35 U.S.C. 103(a) with respect to Kraus/Oda; 4) claims 12 and 26 under 35 U.S.C. 103(a) with respect to Kraus/knowledge of one of ordinary skill in the art; 5) claims 23-24 under 35 U.S.C. 103(a) with respect to Kraus/Oda; and 6) claims 19, 27, and 29 under 35 U.S.C. 103(a) with respect to Kraus/Oda/knowledge of one of ordinary skill in the art. None of these references clearly shows or discloses an element with a capacitive element and an ion implantation resistor as now recited within each of the independent claims.

### ***Specification***

The amended “paragraph commencing at page 3, line 24” on page 2 of the Nov 18<sup>th</sup> amendment is still objected to because of the following informalities: Since the amended change is not clearly shown, it is suggested that paragraph be re-submitted with the intended change identified. Also, it is suggested the phrase --gate of-- be added after “has the” on line 4 of the paragraph to more clearly identify what is actually connected between P2 and N2. [For example, as presently written, it appears the source and drain of transistor P3 could be coupled between P2 and N2.] Therefore, an appropriate correction is required.

### ***Claim Objections***

Claims 5-6, and 9 are objected to because of the following informality: Claim 5, line 10 should have “the potential” replaced with either --potential-- or --a potential-- since that potential has not been previously identified within the claim. Claims 6 and 9 carry over the objection from claim 5. An appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 5-6, 8-10, 12-14, 16-17, 19-20, 22-24, 26-27, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Since claim 1's "first element" includes "a capacitive component" (line 8), and "comprises an ion implantation resistor" (line 18), it is not clear how they actually relate to one another. For example, does the first element have two distinct elements/features within it, or is the capacitive component part of the ion implantation resistor, or vice versa? Perhaps --including a first element comprising an ion implantation resistor having a capacitive component-- was meant. For the same reason described above with respect to claim 1, how does claim 5's "a capacitive component" (line 8) of the "first element" relate to its "an ion implantation resistor" (line 19)? Similarly, how does "a capacitive component" (lines 20-21) of the "second element" relate to its "an ion implantation resistor" (line 22) within each of claims 10 and 12? The relationships between the first/second elements within each of claims 10 and 12 are confusing also. Using the applicant's own figures and disclosure as a reference, transistor P4 (of Figs. 1 and 2), and transistor P5 (of Fig. 2) are identified as resistive elements, and resistors R2-R3 of Figs. 1-2 are identified as an ion implantation resistor or capacitive component. However, it is the combination of transistor(s) P4 (and/or P5) and elements R2-R3 that are disclosed as a means for removing power supply noise. Therefore, what does the applicant actually consider as the first circuit, as well as the first/second elements? If P4 (or P5) is the resistive element, doesn't that correspond to the voltage supply

Art Unit: 2816

circuit's second pair of cascaded transistors within claim 12? Also, it is not clear how the first/second elements of each of claims 13 and 23 remove the power supply noise if both the first/second elements may possibly be referring to elements only within the first circuit. For the same reasoning as previously described, how does claim 17's "a capacitive component" (line 9) of the "first element" relate to its "an ion implantation resistor" (line 24)? It is not clear in claim 19 how the first/second elements relate to the voltage supply circuit/first circuit. For example, doesn't the first element correspond to at least one transistor within the second pair of cascaded transistors of the voltage supply circuit, and isn't the second element part of the first circuit? For the same reasoning as previously described, how does claim 19's "a capacitive component" (line 17) of the "second element" relate to its "an ion implantation resistor" (line 24)?

Claims 10 and 12 are each rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship is how the "second element" (lines 20-22) relates to any of the other elements (e.g. voltage supply circuit, first/second transistors, differential amplifier, first circuit, or switching circuit) within either of claims 10 and 12.

Dependent claims carry over any rejection(s) from any claim(s) upon which they depend.

No claim is allowable as presently written.

Claims 2, 4, 7, 11, 15, 18, 21, 25, and 28 have been cancelled.

***Allowable Subject Matter***

Claims 1, 5, 10, 12, 17, and 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. If the 35

Art Unit: 2816

U.S.C. concerns described above are satisfactorily addressed, the claims would be allowable because there is presently no strong motivation to modify or combine any prior art reference(s) to ensure a single element comprises/includes both an ion implantation resistor and a capacitive component.

Claims 3, 6, 8-9, 13-14, 16, 20, 22-24, 26-27, and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. [Note: All of these claims were rejected because they carry over the rejection(s) from their independent claim. Only a few of them have their own specific type rejection (e.g. claims 13 and 23).]

The applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2816

Any inquiry concerning this communication, or previous communications, from the examiner should be directed to Terry L. Englund whose telephone number is (571) 272-1743.

The examiner can normally be reached Monday-Friday from 7 AM to 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (571) 272-1740.

The new central official fax number is (571) 273-8300.

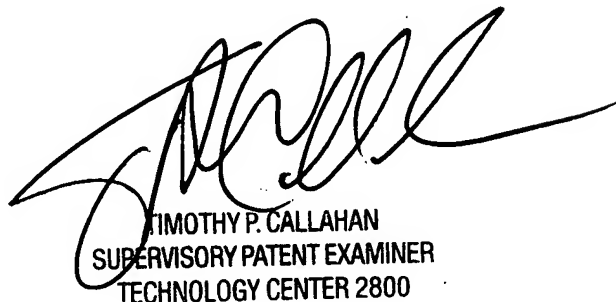
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TLE

Terry L. Englund

8 January 2006

  
TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800